

EFFECT OF PROMOTIONAL ACTIVITIES OF PHARMACEUTICAL COMPANIES ON GENERIC DRUG PERCEPTION OF DOCTORS

Nitpal Singh Chug, Research Scholar,
Global Business School and Research Centre, Dr. D. Y. Patil Vidyapeeth, Pune
(Deemed to be University),
nitpalsinghh@gmail.com

Shripad Joshi, Associate Professor,
Global Business School and Research Centre, Dr. D. Y. Patil Vidyapeeth, Pune
(Deemed to be University),
shripad.joshi@dpu.edu.in

ABSTRACT

Prescription practices of Private medical practitioners are largely influenced by promotional practices of medicine marketers. Such promotional practices by companies tried to twist the attitude of private practitioners toward generic drugs. This study intended to investigate the effect of promotional practices of pharmaceutical companies on attitude towards generic drugs of private medical practitioners. 167 responses from private medical practitioners were collected through structured questionnaires. The analysis showed that promotional practices of companies negatively influence the attitude toward generic drugs. Personal Selling by medical representatives of companies and patient demand for specific drug brands based on information he/she received directly by pharmaceutical companies through email, social media or by post etc are found to be the least influencing factors on prescription practices of private medical practitioners. The other factors which have high influence on prescription practices are given in the conclusion. The scope of future studies is given in the conclusion section of this paper.

Keywords: Prescribing practices, Private medical practitioners, Pharmaceutical promotions, Generic drugs, Personal selling

Introduction

A prescription is a written order given by a doctor to a pharmacist to supply drugs in a specific form to a patient, as well as instructions to the patient regarding the use of medicines. Prescription writing is a complex task that necessitates a variety of skills, including diagnostic abilities, knowledge of medications, and an understanding of clinical pharmacology principles, communication abilities, understanding of risk and uncertainty. Irrational medication use is a global issue, particularly in developing countries such as India. Irrational use of medicine is frequently observed, and it includes the use of too many medicines, the inappropriate use of antimicrobials, the overuse of injections, and the overuse of vitamins. Many studies have found that private practitioners do not follow rational prescribing guidelines and instead prescribe vitamins, tonics, and other drugs, particularly brand names. This increases the financial burden on patients. Similar types of patients are seen by the physician in a tertiary care hospital affiliated with a medical school, where the emphasis is typically on the rational use of drugs. The irrationality in prescription behaviour may be an impact of the promotional practices carried out by pharmaceutical companies. The impact of such promotional activities is tough and very difficult to study in a country like India, the impact of such practices on negative attitudes towards generic drugs by private practitioners can certainly be investigated.

Objectives

1. To study promotional practices of pharmaceutical companies
2. To study the effect of pharmaceutical companies' promotional strategies on the attitude of doctors towards generic medicines.

Literature review

Medical representatives (MRs) are employees of pharmaceutical corporations who are given specific locations to meet with doctors, pharmacists, and stockists. MRs visit doctors to persuade them to write prescriptions for their brands (Bala and Sharma 2019). The most crucial duty a medical representative needs to fulfil is detailing. The most crucial marketing tactic to enhance prescription creation is effective detailing with the use of a visual aid. The most popular method employed by pharmaceutical corporations to increase doctors' confidence in their advertised molecules and consequently brand awareness is continuing medical education (CME) (Lexchin 1993).

According to Wahed (2011) although the premise that physicians' prescription behaviour is solely dependent on the rewards provided by pharmaceutical firms appears implausible, the awards do help physicians recall the

corporate brands, resulting in larger advantages to the corporation. The researchers described anecdotal evidence from physician discussions that, even when competing brands have similar main ingredients, physicians avoid prescribing another brand for refills in order to preserve the potential placebo effects of the original brand that has already worked for the patient. As a result, increased consumption of the firms' products would occur.

Khazzaka (2019) discovered that public relations is the most effective promotional strategy among those that have a tremendous impact on doctors' prescription habits. Other promotional tactics, such as adverts in a journal or other printed product, have the least impact on physicians' prescribing practices. Regular visits by medical representatives and personal interactions between doctors and medical sales representatives may impact the prescribing habits of physicians.

Kamuhabwa and Kisoma (2015) conducted research to understand the factors which influence the prescribing practices of Physicians in one of the cities in Tanzania. They interviewed 192 physicians with structured questionnaires. The study found that medical information from books, and the internet were the main sources of information for the physicians to prescribe medication to their patients. Proven effectiveness, cost to the patient are among factors which physicians from public health centres prefer more than those from private hospitals. The study concludes that there is a significant difference between prescribing practices of physicians in public hospitals and private hospitals.

The study conducted by Narendran and Narendranathan (2013) found that good rapport with physicians, invitations to the product launch meetings, company's reputation, drug quality and brand name are the factors which significantly influence the prescription writing practices of the doctors. Furthermore, studies found that Pharmaceutical promotional activities impact the brand choice by the physicians.

Prescribing the drugs in a quantity more than required and irrational prescribing practices were found prevalent among the private doctor practitioners. (Dhanani and Patel 2015)

A study was conducted by Begum (2012) to observe the practice of prescription by private physicians. 430 prescriptions were studied closely. It was observed that only 0.20% of the prescriptions were written using the generic name of the drug, rest all others were prescribed using the brand name of the drug.

Ansari (1998) conducted a study to check if the prescriptions were issued as per the standard general format and whether the drugs prescribed are rational. The study collected 200 prescriptions out of which 92 were from private hospitals and clinics and the rest others were from public sectors. The audit of the prescriptions was conducted. It was found that 65% of the prescriptions in private hospitals and clinics showed over prescribing. In the private sector on an average 5 medicines were prescribed which was the indication of tendency of 'polypharmacy'.

Codi (2015) reported that the doctor's prescription provides the patient with detailed information and instructions. Despite the WHO programmes, irrational prescribing is still common. The goal of the study was to assess and compare the prescribing patterns of private practitioners and physicians at a tertiary care teaching hospital in a semi-urban area, as well as to determine their rationality. Over a two-month period, 150 prescriptions were collected and evaluated by private practitioners and tertiary care hospital physicians. The drugs used, drugs from the essential drug list, injections, fixed dose combinations, and drugs prescribed by generic names were all observed. The study concluded that private practitioners prescribe more irrational prescriptions than tertiary care teaching hospital physicians. This could be due to promotional pharmaceutical incentives, a lack of professional updates, and a lack of standard treatment guidelines motivating private practitioners to use irrational drug therapy in order to compete. Competitions can be held for aspiring medical students to instill the importance of rational drug therapy at a young age.

According to the MedKart Team (2022) the reasons for doctors not prescribing generic medicines in India are many. The article reports that it is commonly believed that doctors do not prescribe generic medicines because they do not get commission on its sales or the pharmacy located close to the clinic is run by their relatives or so. The article further states the other reasons which include the non-availability of the generic drugs in every medical shop, belief of doctors about inefficiency of generic medicines, and lastly people in India largely recognize medicines by their brand names hence prescribing generic medicine leads to confusion among patients. Because of these reasons doctors in India tend to avoid prescribing generic drugs.

Krunal (2020) conducted a research to analyze the impact of promotional tools on prescribing practice. Self-administered structured questionnaire was used to collect responses from 100 physicians specialized in different

domains. The study found that the promotional tools employed by the companies have an impact on prescribing practice, however such impact the rate of the impact varies among doctors.

The purpose of the study conducted by Srivastava and Bodkhe (2018) was to determine how brand equity (BE) affects doctors' perceived worth (PB). In this primary study, 261 respondents were surveyed using structured questionnaires that contained 21 multiple-choice items. According to research, in India, BE has a significant impact on the doctor's prescription choice. Because they are easily accessible, affordable, and produce adequate results, the majority of clinicians exhibited loyalty to branded generics. The only situation in which branded generics are not widely available is in the specialist therapeutic sector. Doctors have been discovered to be more receptive to promotional materials, including clinical trial data, which presents an opportunity to reevaluate previous marketing tactics and explore untapped therapeutic markets.

Research Methods

Extensive literature review was done to draft the questionnaire. Interviews of Medical Representatives of various Pharmaceutical companies and Medical practitioners were taken to understand the marketing strategies of these companies. Around 8 medical practitioners and 13 Medical representatives were interviewed so as to get valuable inputs while preparing the questionnaire. Based on the study of Narendran, R. & Narendranathan, M. (2013) the questionnaire was prepared. The questionnaire was administered to 200 doctors. 167 doctors returned the filled questionnaire. Stratified sampling was employed to select sample doctors from various regions of the Pune city so as to make the findings of the study more generalizable.

Analysis and Results

Reliability Statistics

Cronbach's Alpha	N of Items
.945	20

Table 1- Reliability of the questionnaire

Since the Cronbach's alpha of the questionnaire was found to be greater than .7, the questionnaire was considered reliable (Gliem and Gliem 2003).

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Discussion with a specialist doctor related to the product organised by pharmaceutical companies	167	2.00	7.00	5.9375	1.58496
Seminars and conferences for doctors sponsored by Pharmaceutical companies	167	2.00	7.00	5.7500	1.58623
Personal Selling by Medical Representatives of companies	167	2.00	6.00	4.9375	1.26841
New product/ drug Launch Meetings	167	1.00	7.00	4.4375	2.09358
Letter pads, paperweight or pens given by Pharmaceutical companies	167	1.00	6.00	3.0625	1.77687
Bulk sampling for trail purpose	167	1.00	6.00	3.0000	1.90076
Costly Gifts	167	1.00	6.00	3.0000	2.15526
Eye-catching drug sample covers and trendy advertising lines	167	1.00	5.00	2.6875	1.78592
Advertisement of drugs through magazines/ banners/ hoardings	167	1.00	6.00	2.6250	1.82721
Patient demanding for specific drug brand based on information he/she received directly by Pharmaceutical company through email, social media or by post etc.	167	1.00	5.00	2.5625	1.56447
Overall Mean				3.8000	

Table 2-Descriptive Statistics Promotional strategies of pharmaceutical companies

The overall mean is 3.8, which indicates that medical practitioners in their own perception do not get influenced by the promotional activities of pharmaceutical companies. However ‘Discussion with a specialist doctor related to the product organised by pharmaceutical companies’ and ‘Seminars and conferences for doctors sponsored by Pharmaceutical companies’ were found to have higher mean values (5.9 and 5.7 respectively), that means these activities influence medical practitioners’ prescribing practices than any other activities.

Hypothesis Testing

H₁- The Pharmaceutical companies’ promotional practices, results into medical practitioners’ negative perception of generic drugs

Pearson Correlation is used to test this hypothesis.

		Overall Attitude towards generic medicines
Advertisement of drugs through magazines/ banners/ hoardings	Pearson Correlation	-0.364*
	Sig. (2-tailed)	.040
	N	167
Eye-catching drug sample covers and trendy advertising lines	Pearson Correlation	-0.415*
	Sig. (2-tailed)	.018
	N	167
Letter pads, paperweight or pens given by Pharmaceutical companies	Pearson Correlation	-0.574**
	Sig. (2-tailed)	.001
	N	167
Costly Gifts	Pearson Correlation	-0.518**
	Sig. (2-tailed)	.002
	N	167
Bulk sampling for trail purpose	Pearson Correlation	-0.452**
	Sig. (2-tailed)	.009
	N	167
New product/ drug Launch Meetings	Pearson Correlation	-0.579**
	Sig. (2-tailed)	.001
	N	167
Discussion with a specialist doctor related to the product organised by pharmaceutical companies	Pearson Correlation	.020
	Sig. (2-tailed)	.912
	N	167
Seminars and conferences for doctors sponsored by Pharmaceutical companies	Pearson Correlation	-0.352*
	Sig. (2-tailed)	.048
	N	167
Personal Selling by Medical Representatives of companies	Pearson Correlation	-0.076
	Sig. (2-tailed)	.679
	N	167
Patient demanding for specific drug brand based on information he/she received directly by Pharmaceutical company through email, social media or by post etc.	Pearson Correlation	.226
	Sig. (2-tailed)	.213
	N	167
Generic Attitude Price	Pearson Correlation	1
	Sig. (2-tailed)	
	N	167

** . Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 3 Correlations

Except for 'Personal Selling by Medical Representatives of companies' and 'Patient demanding for specific drug brand based on information he/she received directly by Pharmaceutical company through email, social media or by post etc.' all other promotional practices are found to be significantly correlated to overall attitude towards generic medicines. Since the Correlation coefficient is negative, it indicates that as promotional practices increase their influence on practitioners; their attitude toward generic drug becomes unfavorable.

Conclusion

Except 'Personal Selling by Medical Representatives of companies' and 'Patient demanding for specific drug brand based on information he/she received directly by Pharmaceutical company through email, social media or by post etc.' all other promotional practices are found to be significantly influencing the perception of generic drugs among the doctors. New product/ drug Launch Meetings, Letter pads, paperweight or pens given by Pharmaceutical companies and costly gifts were the high influencing factors. These factors make doctors develop somewhat negative perceptions. This indicates that prescriptions are not rational and may be written in order to increase the sales of the branded drugs. Future studies may study if the cost of branded drugs increase on account of huge promotional activities carried by the companies.

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